

E.N.I.G.M.A.

European Numbers Information Gathering and Monitoring
Association

FOR YOUR
EYES ONLY

6

PRAGUE
OLX

DEAR FRIEND : *BRIAN ROGERS*
RADIO STATION OLX THANKS YOU FOR YOUR REPORT ABOUT
RECEPTION OF ITS TRANSMISSION ON THE *4 MARCH 1994*
AT *16 55* GMT ON FREQUENCY (IES) *11002* kHz

OUR ADDRESS IS : **MINISTERSTVO VNITRA ČR**
P. B. 21/SK
170 34 PRAHA 7

73 FROM PRAGUE

OUR RADIO STATION OLX IS TRANSMITING ON FREQUENCIES

o - FREQUENCIES USED DURING SUMMER TIME
x - FREQUENCIES USED DURING WINTER TIME
PARTICULARS ARE IN kHz.

3239	3280	3333	4601	4757	5301
	X + O		X		X + O
6280	6758	6865	6958	7577	8142
X	X + O				X + O
9353	10125	10307	11002	11416	11585
			X + O		
14977	15897	16046	18303	20865	22910
O					

Our Address:

ENIGMA NEWSLETTER

c/o B.R.C., 31 Manor Row, Bradford, West Yorkshire, BD1 4PS, England.

Station News and Latest Listening

ALL TIMES ARE U.T.C.

With the end of Summer Time certain stations will revert back to UTC, most stations will also drop back towards lower frequencies for the winter months.

ENGLISH LANGUAGE STATIONS

LINCOLNSHIRE POACHER (Stays on UTC)

10.00 to 14.00 on 15682 (or 15610) 14487 & 16084
15.00 to 17.00 on 11545 13375 & 12603
18.00 to 22.00 on any three of the following
6485 6959 7337 9251 10426 11545 12603 15610

Heavy jamming continues to affect a large proportion of daily transmissions.

LINCOLNSHIRE POACHER TWO (THE CHERRY PICKER)

Noted in the last issue this station does not appear to be operating at present, an off-shoot of the main LP it uses the same voice machine but a different interval signal.

Transmissions were last noted on May 5th 1974, operating to the following schedule.

10.00 to 12.00 on 18684 19884 20474
19.00 to 21.00 on 7484 8320 9263

The interval signal is possibly "Cherry Ripe" a traditional English song from the year 1916, it was composed by Sir John Fredrick Bridge who was born in Oldbury 5th December 1844 and died in London on 18th March 1924. Words by Robert Herrick.

Information we have received suggests that this station is transmitted from a distant location in the Far East, Britain has recently established new facilities in Taiwan following the closure of its Australian operations and its need to move from Hong Kong.

THREE FIGURE ENGLISH (Stays on UTC)

This station can be heard most days on a variable frequency.

Most days at 08.20 between 9270 & 9294 - calling 274

Also heard 01.30 on 9920 - calling 208

07.00 between 7830 & 7794 - calling 636

Problems with poor modulation now seem to be resolved and the station is giving good reception on its 08.20 transmission.

READY READY (Operates to Summer Time will revert back to UTC)

This station operates to schedule, transmissions are repeated at 20 minute intervals. The first two letters of the 5 Figure number represent the agent.

	UTC	WEEK No.	SUMMER	WINTER	
Monday at	20.00	WK2 & WK4	4740	4740	Agent 04
Monday at	21.30	WK2 & WK3	6290	4740	Agent 04/36
	21.50	WK2 & WK3	5865		Agent 04/36
	22.10	WK2 & WK3	5235		Agent 04/36
Tuesday	20.00	WK1 & WK2	6675	4460	Agent 58/04
Tuesday	20.20	WK1 & WK2	6290	4740	Agent 58/04
Tuesday	20.40	WK1 & WK2	9050	4270	Agent 58/04
Wednesday	19.00	WK3	4740		Agent 84
Wednesday	23.00	WK2 & WK4	6935	5235	Agent 13
Wednesday	23.20	WK2 & WK4	6675	4740	Agent 13
Wednesday	23.40	WK2 & WK4			

Please send in all logging of this station.

Most probably all messages are repeated twice within the next hour (on separate frequencies) e.g. h+00 h+20 h+40
h+30 h+50 h+10

This station operates a much larger Morse set up and we shall be looking at scheduling this for the next issue.

NANCY ADAM SUSAN (Stays on UTC) & MARY SUSAN ADAM

This station gives distant reception in Britain but may well be situated in the Middle East (see our feature Postcard From Greece in this issue).

Daily at 20.00 on 5530 USB NAS
Daily at 21.00 on 4130 USB MSA

N.N.N. (Stays on UTC)

This station was previously listed in our German language section, from June 6th all transmissions are sent in English, group counts have also increased.

		SUMMER/WINTER
Monday	at 10.00 on 8180 repeated at 21.00 on 5177 (4644)	
Wednesday	at 04.00 on 5072 repeated at 21.00 on 5177 (4644)	
Thursday	at 04.00 on 5821 repeated at 20.00 on 5821 (4024)	
Friday	at 04.00 on 5072 repeated at 21.00 on 5177 (4644)	

The reason for the four transmissions would seem to be as follows, each message is repeated on the same day through-out the month, e.g. the Monday message is sent on every Monday for the whole of a single month.

COUNTING STATION (STAYS ON UTC)

FULL MESSAGE TRANSMISSIONS ENGLISH AND GERMAN LANGUAGES

Mon at 04.00	5298//7320	G	Thur at 04.00	6932//8075	SP
Mon at 18.00	17567//18726	E	Thur at 21.00	5716//6797//	
Mon at 21.00	5716//6797//			7410 (3 Freq)	E
	7410(3 Freq)	E	Thur at 21.00	9049//12238	E
Mon at 22.00	5750//7320	G	Thur at 21.00	8185//10162	E
Tue at 00.00	19535//?	E	Fri at 00.00	19535//?	E
Tue at 04.00	7320// ?	G	Fri at 04.00	5298//7540	G
Tue at 13.00	7547//10529	E	Fri at 17.00	18225//20872	E
Tue at 14.00	10723//12221	E	Fri at 18.00	17667//18726	E
			Fri at 18.00	8310//?	E
Wed at 00.00	20115//?	E	Fri at 21.00	7588// 11034	E
Wed at 04.00	5298 //?	G	Fri at 21.00	9435//?	E
Wed at 04.00	5715 //?	G	Sat at 00.00	20115//?	E
Wed at 12.00	11470//?	E	Sat at 13.00	7547//10529	E
Wed at 18.00	12238//17567	E	Sat at 14.00	18225//20872	E
Wed at 18.00	17567//18726	E	Sat at 23.00	14155//?	E
Wed at 21.00	9049// 12238	E			
Wed at 21.00	7588// 11035	E	Sun at 04.00	5298//7540	G
Wed at 21.00	9155// 8185	E	Sun at 12.00	16086//13555	G
			Sun at 14.00	10723//787	E
			Sun at 14.00	12221//?	E
			Sun at 16.00	10374//?	E
			Sun at 21.00	8010//?	G

E- ENGLISH
G- GERMAN
SP-SPANISH
? Indicates // Not Found

German ID's are 108/152/219/220/924, 2 Voices are used one says "noin" & the other "noichen"

COUNTING STATION - CONTROL TRANSMISSIONS - All Start at h+30

Daily ENGLISH		Daily SPANISH (reported)	
00.30	5205// 7540	00.30	5264 //6792
01.30	7763// 9918	02.30	6840 //9958
06.30	5205// 9224	10.30	7725 //10324
07.30	13581//16451	18.30	11491//16310
13.30	8559 //11441		
13.30	13432//16434(not same)		
17.30	5205//8556//12285		

After something of a lull in activities the Counting Stations seem to be very busy, German language transmissions also seem to be re-appearing after a fall off following the end of the Cold War, it is also interesting to note the introduction of some transmission on a 3rd frequency.

Jamming continues to affect almost all Control transmissions, but there is also an increase in the amount of jamming taking place on full messages.

ALPHA PHONETIC STATIONS

We covered these in great detail last issue, but will now report all known active stations.

2270	JSR	2628	FTJ	2743	ULX
2953	SYN <i>VLB</i>	3150	PCD	3270	KPA
3417	ART	3640	VLB	3840	YHF
4165	SYN/ <i>CIO</i>	4270	PCD	4360	MIW/CIO
4463	FTJ	4560	YHF	4665	VLB
4780	KPA	4880	ULX	5060	JSR2*
5091	JSR	5170	GBZ-J*	5230	VLB/CIO/ <i>SYN</i>
5339	OEM	5437	ART	5629	SYN/ <i>CIO</i>
5715	ZWL	5820	YHF	6270	ULX
6370	MIW	6500	PCD	6745	VLB
6840	EZI	6911	OEM	7322	FTJ/KPA
7445	KPA	7540	JSR	7605	CIO
7613	GPO*	7760	ULX	7918	YHF
8127	CIO/MIW	8465	SYN/CIO	8641	MIW
9131	EZI	9270	???	9402	YHF
10125	CIO <i>VLB</i>	10648	YHF	10820	VLB
10970	MIW-2	11565	EZI	12747	MIW/ <i>SYN</i>
12950	MIW	13532	EZI	13921	CIO/ <i>SYN</i>
14750	CIO/MIW	17410	EZI	19715	EZI
20740	SYN				

Please refer to last issue for operating patterns, all above reported.

Stations GBZ-J, JSR2 & GPO-1 were heard only on 25th July. CIO seems to be moving around and was heard on July 19th sending CIO 14 D00 on 5230/4165.

Readers may also be interested in the CW station 4XZ, which emanates from Haifa and claims to be an Israeli Naval Station. This is perhaps not what it seems and is likely to be the CW arm of the vast Mossad operation.

Frequencies logged so far include 2800 4241 4331 6379 8012 8437 10046 12984 13509 14545 15753 16495 17050 & 23503.

Most of the time, the station sends its marker "V V V de 4XZ 4XZ BT BT", when it goes into message mode, it send 5 Letter Groups with the following format :

e.g.

(NR 32 < header > BT BT < message > BT BT) x 2, followed by NR 32 < header > BT BT AR AR

One interesting feature is that the group count e.g., 32 , appears in reverse. In other words, NR 32 means that 23 groups will be sent. This is very much like the format used for Nancy Adam Susan. Probably indicates Hebrew or Arabic targets as their numbers are "reversed".

GERMAN LANGUAGE STATIONS

GERMAN TWO-LETTER STATIONS

It is some time since we last looked at these in detail and we hope to cover them in the next issue, traffic analysis is important due to the many call signs and agent numbers in use. Please send in all logs of this station with call sign details.

All transmissions commence at h+00 or h+30 and tend to be concentrated between 16.00 & 23.00, however day time traffic is quite active.

We have a full frequency list including 9 previously unreported.

2707 3228 3262 4543 4594 4821 4888 5015 5182 5284
5732 5770 6765 6853 7404 7532 7740 7752 7858 8063
8173 9040 9325 9450

10177 10460 10500 10740 11617 11108 11545 12092 12210 12314
13362 13775 13890 14622 14945 15610 16055 16220 16414 17430
19295 19755 20240 20675 22885 18575 18195 20350 13572

Transmission commence with 2 Letter (e.g. Romeo Delta/Julie Whiskey etc.) repeated with electronic tones for 5 minutes. Most transmission are in USB.

3 NOTE ODDITY

We have followed this station with interest, the monthly frequency changes make it hard to follow.

Transmissions seem to take place at four set times ;

	April	May	June	July
Fri 04.05	4327	4620	6875	6379
Fri 19.40	4583	?	5256	?
Sat 20.10	6641	7538	7482	6853
Sun 21.10	4750	5637	6545	5718

Monitoring reveals that this station operates an annual schedule, frequencies change each new month but are on a 1 month cycle. The projected frequencies for the Sunday transmission at 21.10 are as follows ;

JUNE 6547, JULY 5718, AUGUST 5617, SEPTEMBER 5487,
OCTOBER 4827, NOVEMBER 4139, DECEMBER 3815, JANUARY 4125
FEBRUARY 4356

An additional Sunday transmission has been heard — may replace the Friday one: August 5178 at 1940. (differs from 21.10)

SWEDISH RHAPSODY

Swedish Rhapsody was composed by Alfvén Hugo, born in Stockholm 1st May 1872 he died at Falun Sweden 8th May 1960 age 98 years. He was a violinist & composer.

Readers may be interested in the following information which came from a book entitled "Spys"..... by Tim Healey.....

"From 1940-45, the Germans were masters of Europe, but inside every occupied country resistance groups carried on the fight.

The groups often used short wave radios to transmit information. The sets were known as 'musical boxes' and from the term came the name of the big Communist network which operated inside Germany itself".

DAY	TIME	FREQUENCY	1	2	3	4	5
Mon	17.00/30	6200	#D1/2		#M1/2		
Mon	22.00/30	6200	#D3/4		#M3/4		
Mon	23.00/30	6200	#D5/6		#M5/6		
Tue	06.00	4195 MCW		#H1			
Wed	00.00	5340 MCW				#Q1	
Wed	00.00	6507				#R1	
Wed	13.00	6200	#D7		#M7		
Wed	16.00	5748				#P1	
Wed	17.00/30	6200	#D8/9		#M8/9		
Wed	20.00	5340				#P2	# ??
Wed	19.00	4195 MCW		#H2			
Wed	21.00	3825 MCW		#H3			
Wed	22.00	5340				#P3	
Wed	22.00/30	6200	#D10/11		#M10/11		
Wed	23.00/30	6200	#D12/13		#M12/13		
Thu	19.00	5340 MCW				#N1	
Thu	20.00	5340		#I1			
Thu	20.00	5340 MCW			#N2		
Thu	21.00	5340		#I2			
Thu	22.00	5340		#I3			
Sat	21.00	4779		#??			
Sat	22.00	5340		#??			
Sun	17.00	5340			#L1		
Sun	21.00	5340		#G1			
Sun	22.00	3825	#C1				
(Jk	23.00	5340	#C1				

See Issue 5 for notes.

GERMAN LADY '00000' ENDING

Not heard that often, this station sends a strong signal, transmissions are most likely random.

Mon	19.50	8110	Sat	20.20	8035 calling 319
Mon	20.00	5750			
Tue	19.50	8117			

Delivery of message is slow and very clear, groups are paired.

NUI NOICHEN (Messages are sent in Single Groups, often uses a 4 Figure Decode Key).

If a message is sent the station will repeat on a further two frequencies at the end of transmission, if no message is sent the repeat Null Null Null is sent again immediately after the transmission on another frequency.

Tue	06.30	7379 8178 9280	calling 278
Tue	20.00	6775 5775	calling 774 (variant format)
Thu	06.30	7379 8178 9280	calling 278
Thu	19.10	13385	calling 723/964
Thu	22.00	6925 5830	calling 498
Sat	08.00	13548 14585	calling 456...562

Repeat frequencies are given only where known.

On March 22nd the station sent 335 groups starting at 06.30 and ending at 08.25.

EAST EUROPEAN AND RUSSIAN LANGUAGE STATIONS

'BULGARIAN BETTY'

The daily Voice control message changed frequency in July from 4485 to ;

Daily at 13.55-14.02 on 5027, format remains un-changed.

August - reverted back to 4485 !; 5027

Morse transmissions are quite active from this station and recent loggings include :

Mon	08.20	9350 or 9165	Thu	07.00	5030 or 5737
Mon	10.20	11415	Fri	07.00	7475
Mon	19.00	5521	Fri	07.30	5301//5860
			Fri	08.00	4765
Tue	10.20	11415			
Tue	14.20	14650	Sat	12.50	14562
Tue	19.00	6943			
Wed	05.20	4030	Tue/		
Wed	14.20	14650	Wed	17.00	11117
Wed	19.00	6943			

STATION YT YT YT (Was operating to Summer-time)

No recent reports, last heard on June 6th. Was operating at the following schedule

Mon	07.00	4424
Mon	15.15	4760 (heard in Russia)
Mon	18.00	4424 Also Wed & Thur

We noted one 4 message transmission in March ; all rest were 3.

DRUMS & TRUMPETS

This station is quite rare and only sends what seems to be one message each month.

The transmissions is sent on a 'date of the month' schedule.

9th of each month regardless of day at 19.30 UTC 4740

* may have a repeat, most likely frequency would be 6675 kHz also possibly on Summer Time, so try at 20.30 UTC also. (Part of the Ready Ready/Aida/Bugle Set up).

RUSSIAN WOMAN '000' ENDING NEW STATION NOT PREVIOUSLY REPORTED

This station sends a 3 figure ID at low modulation followed by a loud "hollow" sounding message which may be read by a live announcer.

Tue	17.40	5740	calling 342	First group always '00000'
Thu	17.40	5740	calling 342	" " " "
Thu	19.40	5290	calling 491	

The choice of 5740 gives some problems due to it's use by a clandestine station which is jammed,. The Russian Woman does however manage to get above the noise, may move back one hour at end of summer time ?. Worth listening for is this station...greet's agents with Adieu !

RUSSIAN COUNTING MEN

The daily Russian Counting Man on 4019 kHz at 19.00 was last heard in June, however a peculiar transmission can be heard most evenings on 4633.

Daily starting at random in the evenings on 4633 a continuous loop tape is played for hours on end...we have, however, had a report of English 5 figure groups from this station, the tape consists of an announcement followed by a count in Russian.

RUSSIAN MAN in RUSSIAN AND ENGLISH

We have included a major feature on these stations with this issue.

We are keen to receive reports on these stations which seems to have considerably increased their activities this year.

For your information and to assist with logging the Russian numbers are "spoken" as follows;

- 1 Adean 2 Dva 3 Tri 4 Chetirye 5 Pyet 6 Shest 7 Syem
- 8 Vosem 9 Devyet 0 Null

Hope this will help.....

DLX DLX DLX (Stays on UTC)

No changes to schedule published in last issue, may switch to winter frequencies - see QSL Card on our cover.

Frequencies used during winter are 3280 4601 5301 6280 6758
8142 11002.

Station Address is Ministerstvo Vnitřní ČR, P.B. 21/SK,
170 34, Praha 7, Czech Republic.
(This is the Ministry of the Interior!).

DLX declined to indicate just what the transmissions are or who they are aimed at !.

GRAVEL VOICE

No reports received for this issue, very hard to find random transmissions this station is 'distinct' in that the voice is harsh sounding and deep.

THE STRICH (Sends a 3 figure identification followed by /00- very rarely sends a message but is widespread in both voice and morse but hard to find due to only short transmissions).

We will start with regular voice messages,

Tue	21.00	5050	German Calling '752' +Wed 0800 78
Wed	06.00	6750	German Calling '496'
Thur	04.30	6905	English Calling '231'

regular morse messages,

Daily	04.30	5150	Calling '284'
Daily	20.05	4465	Calling '287'
Mon	07.30	5550 '017'	Thu 06.30 5520 '044'
Mon	07.30	5860 '552'	Thu 07.30 5860 '552'
Tue	06.30	5365 '042'	Thu 13.00 8100 '553'
Tue	06.30	5520 '042'	Fri 07.00 5610 '010'
Tue	13.00	6850 '553'	Fri 12.30 9180 '312'
Wed	07.30MCW	5180 '043'	Sat 07.30 5860 '552'
Wed	07.30	9030 '507'	
Wed	09.00	6840 '214'	
Wed	13.00	6850 '553'	

287 receives a daily call and began in early March on 4465 at 20.00 for 10 minutes. In May this was reduced to 5 minutes from 20.05 to 20.10, and it continues with this. Also this ID was keyed much faster than other morse Strich calls. It is now sent at a moderate speed although still fast by comparison with others.

287 also receives some non-standard formats ;

18.4	287/111/00	27.7	287/333/00
7. 6	287/111/00	28.7	284/333/00(heard on 5150 04.30)
21.7	287/111/00	28.7	287/111/00

These triplets have never occurred with other ID's. Does this mean 284 & 287 are linked in some way ?.

Since the last issue some Morse ID's have received messages.

Tue	29.3	06.30	6640	047/52 +
Mon	11.4	07.30	5550	017/53 +
Thu	16.6	06.30	5520	044/53
Wed	27.7	13.00	6850	553/78

+ first logging of these ID's

Active ID's at present are 010 018 042 043 214 231 (English) 284 287 496 (German) 507 (MCW) 553 752 (German) and probably many more. Schedules slowly but constantly change.

New ID's 010 017 755 (Slavic 'Chetta') 231 (English) 287 507.

New active frequencies are 6840 and 5180

SPANISH LANGUAGE STATIONS

Two different stations are operating in Spanish (excluding the American Counting Station).

The following logs relate to both stations, we cannot disentangle them at present. One ends in 2 and the other ends in 3 'Finals'. One station sends paired groups and the other single groups with different voices.

Good Luck !

Mon	05.00	5420	Fri	00.00	8136
Mon	06.00	4030	Fri	04.00	4480
Mon	07.00	5415	Fri	05.00	8135/4028
			Fri	06.00	4028
Tue	04.00	4480	Fri	06.00	6800
Tue	07.00	5415/8135	Fri	07.00	7846
Wed	04.00	7680			
Wed	06.00	4030	Sat	04.15	6840
Thu	05.00	9112/9100	Sat	07.00	8135
Thu	07.00	5415	Sun	04.00	7863
			Sun	07.00	5415

~~~~~  
Thank you to all our readers for the information in our Latest Listening Section, I am sorry we cannot acknowledge every letter, but all information is used to form this section. The next issue of ENIGMA will be published w/c JANUARY 16th 1995, please send in your contributions to arrive by DECEMBER 11th 1994...post early to beat the Christmas rush.

IN THE NEXT ISSUE OF ENIGMA.....

The 3rd Part of our Morse Numbers Station Special  
Simon Mason Writes..... A Week with DEA47  
Plus Logbook, Letter, Features & "Things that go Buzz"

## Morse Numbers Station News

(M13) THREE LONG DASHES (station 4 - supplement part 1)

A quiet period in June, activity picking up now. Like Russian Man it chooses random frequencies, many new frequencies heard.

12.7 20.00 9385 "491-000 124 24". This 000 format is rare and does not signify null message. In this case 24 groups followed.

(M11) THREE ZEROES (station 5 - supplement part 1)

Several multiple messages e.g.

Wed 8.6 18.00 5007 4 x 5F groups message in one transmission  
463-37 05, 763-21 05, 763-18 05, 918-42 05 (two messages to the same agent 763 !).

Wed 6.7 18.00 7380  
463-11 35, 708-14 37, 953-35 40. New frequencies include :  
5007, 5475, 3862, 9165.

FIVE ZEROES (station 7 - supplement part 1)

(M14) FAST usual level of low activity - a few transmissions per month, new ID's 651, 821.

(M24) SLOW after a lull, a burst of activity in July - mainly null messages.

(M1) TWO TONE (station 12 - supplement part 2)  
Has begun additional transmissions using new ID's :

Mon 25.7 19.15 5252 " ? -324 22"  
Tue 26.7 07.05 5247 "507 723 727...723 727 31 31 (5 figure pairs) 724 724 31 31 000" seems to be some confusion over decode key ! Is it 723, 724 or 727 ?.

Combined with poor keying this station must be a nightmare to decrypt !!!.

On Thur 28.7 the usual 18.00 transmission developed a fault where the call never took place and only 3.5 of the 5 figure pairs were sent.

At 20.00 came one of its strange secondary formats :

"025 025 025 11301 11301 333 333 333 11554 11554 777 06 777 06  
333 10 333 10 "

This station is well worth listening to for its variety...!  
On 1st Sept ~~no~~ '025' transmissions but at 1700 on 5474 '463' 42 group.

(M23) THE ODD/EVEN STATION (station 11 supplement 2)  
Now uses both 7520 and 7850 in parallel daily at 17.00 & 21.00 to send its usually null messages for around 10 minutes.  
On 1st Sept no 1700 transmission but usual '197' at 2100.

ALL OTHER MORSE STATIONS- no change, activity much the same.



## TRANSMITTER SITE INFORMATION

We have received quite a selection of letters asking about the locations of the various Number Stations and we are introducing this new section to report on information we have received.

### GERMANY

In a previous issue we reported that the call sign DFC37 and DFD21 which ceased transmissions in December 1992 were located at Bonames near Frankfurt. These stations transmitted for many years and the reported targets were supposed to be Rome and New York, although it seems more than likely they were in fact targeted at Western agents in the former East Germany.

Further information concerning Bonames has recently come to light.....

Andreas sent us the following....."In a brochure of the Telefunken Sendertechnik Company I read some facts about the building up of the transmitting station at Bonames near Frankfurt/Main. Bonames was in the area occupied by the United States, and the Americans wanted to give the young Federal Republic of Germany the possibility of its own short wave communications. It was decided to construct a transmitting site at Bonames. The station was built in 1952 and the Telefunken Company installed six 20 kilowatt SSB - transmitters, 20 years later the same company renewed these facilities.

It is possible that these facilities are used by the large German Two-Letter network of Numbers stations which we can still hear daily, the voice machines used by the former DFC37 & DFD21 continue in daily use via the Two Letter network.

Further information also arrived from Steffen who is located about 7km East of Bonames, Steffen told us about the activities of DFC37 & DFD21 and reports that the signals were always very strong causing interference throughout the dial, plus cross-modulation, mirror signals etc.

We have also received information about two huge transmitting facilities at Frankfurt-Eckenheim (south of Bonames), with American transmitters operated under the name German Telecommunications Authority.

Further information concerns two transmitter sites about 3 km from Eckenheim (east of Bonames and close to Bad Vilbel) which run under the name of DENA (DEutsche Nachrichten Agentur, German News Agency) DENA ceased to work in August 1949, however dpa (German Press Agency) continued to transmit on long wave (RTTY) from that site.

We are very keen to learn more about these locations, and would ask readers for help in checking out what may be heard in these areas at high signal strength. If you receive a Numbers Station at high signal level in your area, where-ever you are situated please let us know. Do you live near a H.F. transmitting station ?.

We would also ask readers to write in with ideas and suggestions about transmitter locations and the agencies involved.....you do not have to include your name and address if you would prefer to remain anonymous.....

## Things That Go Buzz In The Night

We had a good response to our section "Things That Go Buzz in the Night" and would like to make it a regular feature, but due to space we must restrict it to just one page this time round.

THE BUZZER Continues on 4625 kHz, around May 6th and July 25th for a few days the BUZZER sent out harmonics on 9250 and 13875 kHz causing interference to Lincolnshire Poacher on 9251 kHz, problems seem to occur when the BUZZER turns up the power !!! At 20.40 on June 21 st the BUZZER appeared on 5310 kHz for several hours, working // 4625.

We received the following information concerning this station....

It is something like (!) Embassy Communications, the frequency is shared by two stations in two "highly Sensitive countries" The main office is situated in Vienna at the place, where 4U1VIC is operated. This is the Vienna International Centre of the United Nations. Comments welcome!

THE PIP This is still active on 3757 kHz in the evenings, indeed it was quite strong at 01.00 recently, also operates on 5450 kHz, sometimes simultaneously.

THE ECHO This station started on 4080 then moved to 4119 kHz, at present it is active on a new frequency of 4382 kHz in the evenings, the channel is quite bad at times.

THE CRACKLE Continues on 5494 AM and 5505 USB can be heard all evening. Also heard on 5340 8070 & 12220 but less often.

THE BACKWARD MUSIC STATION This may be a recognised form of communication but sounds unintelligible! on 5200 kHz and 6752 kHz most evenings heard again as late as 01.00, goes on for hours with what sometimes sounds like broken speech. Also 6700 6722 & 13165. +7573

THE 41 SECOND BLEEP No idea what this is but it can be heard with a bleep every 41 seconds on 14867 kHz, not always on, but best heard late afternoons and early evenings, be persistent and sit on the frequency.

THE TIME SIGNAL This was sent to us by Harold in Southampton, this curious station transmits on 5053, 5181 or 5730 kHz and sends a 14 figure group and then stays silent for 50 seconds, the next 14 figure group is then sent and the last number advances by one.

e.g. 990803??8????? 50 second gap ? are sent (...--..)  
990804??8????? 50 second gap  
990805??8????? etc.....

This station seems to send the time at + 2 Hours, if you listen at 18.03 it sends 08.03 ! any comments very welcome...



## Letters to E.N.I.G.M.A.

Welcome to our letters page, first a quick thank you to everyone for all the letters and contributions we have received. We are sorry that we cannot acknowledge each one we receive but rest assured we read and collate all the information you send for present and future issues.

Starting with Andreas in Landsberg who sent in two very detailed letters and ask's a couple of questions...what is MCW ?, This is modulated carrier wave....almost all morse transmissions are sent in plain CW and need a BFO to resolve into audio tone signal. MCW is like ordinary AM broadcast sound and therefore the Numbers Stations stand out from ordinary morse signals. Andreas also asks about the photographs on the cover of issue 5....the top two are of the new MI6 British Overseas Intelligence (SIS) headquarters and the other four are of MI5, Britain's Internal Security HQ, both buildings face each other across the River Thames in London.

Gert in Zoetermeer Holland sent us some information about Single Letter Beacons, amongst these included stations reported to be in the CIS. I would like to ask any reader if they have further information on these reported locations. On the subject of Single Letter Beacons Ken in Doncaster sent us a nice little story.....

Ken writes....from about 1977 on until the late 1980's I used to spend a lot of time in Santa Elualia, Spain. I became friendly with a man who, although an American citizen with a US Passport, also had a British Passport because he was born in the U.K. He never spoke much about his background except that he had worked in a civilian capacity for the U.S. Government, and had been connected with radio. One day, during a visit to his house, he showed me a radio receiver which turned out to be the Yaesu FRG7, which at the time was the last word in hobby sets.

What intrigued me, at the time knowing anything about radio, was that he had modified it internally and in addition fitted a digital frequency counter. During his demonstration, which impressed me mightily, I heard a typical Single Letter Beacon. I think, just think mind, it was sending 'S' ; about the only letter I knew at the time. Some time after that I heard that he had left the Island and gone to live on the mainland and I gathered from a mutual friend in Sta. Elualia that many people believed he was connected in some way with the CIA.....

**"ACHTUNG ACHTUNG" Military Budgets for West European Countries in 1993 were ranked as follows ;**

Germany, France, Italy, UK, Spain, Greece, Netherlands, Belgium, Portugal, Denmark, Ireland, Luxembourg. Perhaps intelligence spending follows a similar pattern !.

Now a letter about the "Newsletter"...from Geoff in Bridgend....who sends in one or two suggestions about the way we present the info....Geoff asks - can we have the name and address prominently displayed ? ....Can we have BOLD headings to make it easier to find things ? Well we hope you like the changes we have made to this issue and we are always pleased to receive your comments. Thanks also Geoff for all the information which you provide.

Our thanks to Tony of Norfolk who very kindly did two excellent write-ups about ENIGMA in "Everyday with Practical Electronics" and the morse magazine "Morsum Magnificat". We have received many enquiries and gained new members from these articles.

Quick hello to all members of the New Zealand DX League, Ashley in New Plymouth New Zealand tells us that interest in Number & Phonetic stations is growing in New Zealand and Australia.

*"ACHTUNG ACHTUNG" Since the end of the 1960's, many West European Counter Espionage Agencies have adopted a standardisation to name the Numbers Stations. The same applies to agents who also have a codification. So, they have in each country huge computer data-bases able to provide all kinds of statistics about every agent : frequency, date and time of each transmission, number of messages received each month of year, number of groups received/month of year, etc... They also make correlations between messages received by the agent and events that occurred during the same period of time, in the world or in the espionage community.*

*Of course, they make a paper transcription of all messages received on SW (many thousands per year) and conserve them (now on magnetic or optical forms) with the hope of being able to unscramble them later, if they can catch a spy who will give them his code. The spys are mainly found when a transfuge give their names in exchange for being accepted in the country. The counter spying agents try to catch the spy, preferably at the exact moment when he is receiving a radio message from his agency.*

*By the way, they know the exact frequency, and sometimes they can obtain from the captured agent the format to decipher the message. Afterwards, they pick up all their archives of messages sent in the past and try to decipher them.*

ENDE ENDE (Anonymous contribution)

On the subject of anonymous information, may I thank those readers who send in logs but do not include a name or address, the logs are very much appreciated.

Greetings to Ivan in Pskov, Russia, thank you for the postcards and information. The logging of YT at 15.15 UTC on 4760 kHz was very interesting.....



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Now an interesting letter from a retired Flight Lieutenant, who is involved with the Air Training Corps....he writes....."one of the problems of our Air Training Corps Nets is the unexpected blocking of service channels by strong CW Signals, which are usually of five figure number groups".

Well these sound very much like CW Number Stations, perhaps you could pursue this interference through official channels in order to find the source.

Or maybe a call to the DTI monitoring station at Baldock would produce results. If you wish to report GRM to your transmissions their telephone number is 0462-456551. Let us know how you get on.

Mean-while Short Wave Magazine recently mentioned the goings on at Irton Moor, Scarborough, North Yorkshire. The site belongs to the Composite Signals Organisation, which is the civilian intelligence gathering arm of GCHQ Cheltenham. Irton Moor is just one of several such locations around the UK.

### GCHQ

The May column contained a simple request for some information on a site near Scarborough, known as 'CSOS Irton Moor'. This resulted in a number of letters, many of them anonymous, but all reporting just what goes on there.

This site belongs to the Composite Signals Organisation, which is the intelligence gathering arm of the GCHQ at Cheltenham. Irton Moor is

just one of several locations around the UK dedicated to the monitoring of national and international electronic communications of all kinds, including radio, from v.l.f. to e.h.f. Signals are fed from the sites back to Cheltenham for examination and analysis. The US National Security Agency operates a similar facility at Menwith Hill near Harrogate in North Yorkshire. As one correspondent put it, "I bet their frequency lists are something to behold!"

Short Wave Magazine, July 1994

We have since learned from an ex traffic handler at CSOS Chilwell Nr Nottingham that CIA numbers stations operate from Barford St John Oxfordshire and that MI6 have used Poundon and Creslow Foreign Office sites to send messages to agents. He also tells us that the CSO records every single numbers transmission received. Military SIGINT (Signals Intelligence) is monitored separatley by military agencies e.g. RAF at Digby Lincolnshire, Army at Beaumanor Leicestershire.

### IMPORTANT

We are very keen to learn more about H F transmitting facilities through-out Europe and would welcome any research or information past or present. If you receive any Numbers Stations with a particularly strong signal in your area please let us know.

OUR ADDRESS IS ; ENIGMA NEWSLETTER, c/o B.R.C. 31 Manor Row, Bradford, West Yorkshire, BD1 4PS, ENGLAND

OR VIA ELECTRONIC MAIL ; mikec@praxis.co.uk  
(We have no connection with Praxis Systems plc)

## Simon Mason Writes .....

### HITCHES AND GLITCHES.....

In the somewhat mechanical and predictable world of number stations any deviations stand out a mile, rather like the test card girl suddenly walking off screen. Moments like this are probably the most rewarding part of the hobby, other than finding a new station or perhaps getting a QSL card !. Over the years numerous examples of "mistakes" have been logged and here are a few examples.....

#### GERMAN 2 LETTER STATIONS

On 7404 kHz a YL with message for 'Golf Zulu' at 21.00. At the same time on 7740 kHz a different message for 'Golf Zulu' but using the same address of 628. Usually only 'Papa November' has sent simulcasts of 2 letter traffic.

On 4888 kHz a YL repeating 'Alpha Uniform' at 09.00 after which message for 214, 34 groups. Repeated following day on 4821 at 10.00. 214 is an address used by 'Delta Mike'. 'Alpha Uniform' had been around for many years but always in German for agents 006,244,349,385,554,600 and 691. *This one was in English.*

#### DLX

On 11002 kHz at 11.00 DLX YL repeating -29 - was a number obscured by microphone key click. On 6758 same YL repeating 329 and into 5 figure groups without fault. On 11002 kHz however all number 3's in the message were inaudible. On 3280 kHz at 20.00 YL repeating "click 97", but on 5301 YL sent 597. When message started 'pyat' was normal on both frequencies.

#### THE STRICH

On 4780 kHz YL repeating '288 oblique zero zero' from 20.00 to 20.05, then out and at 20.10 CW sending 288/00. At 20.15 Mossad Alpha Phonetic YL with KPA2.

#### ALPHA PHONETIC STATIONS

For many years Mossad station VLB has used 4665//7605 at 45 minutes past the hour. In June 1994 CIO frequency 6745 kHz had a "chugging carrier" like the Counting Stations have, which stayed on air for hours at a time. In mid June VLB turned up on 4665//6745 and CIO moved to 7605. However, the "chugging carrier" moved from 6745 to 7605 and took CIO along with it. VLB had a normal carrier which went off air quickly.

#### BULGARIAN BETTY

The station turned up for one day only with a voice message on 7541 kHz at 10.15, after 'Konet,Konet' CW sent AAA for 1 minute. One hour later the message was repeated on 8026 kHz.



SWEDISH RHAPSODY

On the Saturday prior to it leaving its prime time slot SR turned up on 4885 kHz at 20.00, this was in addition to 4779//5340//6507 which were also all in use at the time.

The "Hitches & Glitches" can often provide a tiny clue to the secret workings of the Number stations.....

~~~~~  
Simon as asked me to inform readers that he has now exhausted his supply of copies of "Secret Signals", but to let you know it is still available from the publishers Tiare Publications.

Tiare Publications P.O. Box 493, Lake Geneva WI 53147 USA

Priced at \$9.95 + \$3 s/h.

I understand that it is possible to order via credit card.

~~~~~  
MORE ON THE TYROLEAN MUSIC STATION

In our previous issues we have carried various short articles about the "Tyrolean Music station", this station was very active during the 1970's and operated on Saturday s and Sunday s on 6425 & 6660 kHz.

In our last issue John Franklin of Ripley reported the location of this station; we wrote to John for more information and he sent us the following.....

What few pieces of information I have about the station are entirely from memory - and it is almost 20 years ago now ! so I may be wrong on some details, but, a friend of mine who lived in Gottingen was able to deduce that the station was in or near to the town of Burg in the then D.D.R.

It was noticeable that the Tyrolean Music Station used a form of automatic level control, during periods of no modulation the gain circuit would rise gradually bringing up the extraneous hum clicks and noises which could often be heard. On more than one occasion I could very faintly hear a radio programme, upon checking this out I discovered it to be a D.D.R. station on 904 kHz Medium Wave, so there is a strong possibility that the two stations were at the same site.

The 904 kHz Medium Wave station did at certain times of day become 'Der Deutes Soldaten Sender' which I believe was aimed at the West German Army with subversive material.

There is little I can add to the above except to say that the music played kindled an interest in Tyrolean folk music which now runs into quite a few LP's and tapes.....John Franklin.

**A POSTCARD  
FROM GREECE . . .**



Armed with a 5m reel of wire slung into the nearest grapevine as an aerial and an old Sony 7600 portable, I carried out the odd bit of numbers station monitoring whilst on holiday in the Greek Islands this summer.

The primary objective was to perform a periodic check through the day on the Lincolnshire poacher. If this station does indeed transmit from Cyprus, it should be a good signal on all frequencies at all times. Anyway, here's what I found.....

Lincolnshire Poacher was an unexpectedly poor signal all day 'round. What was more, jamming which is quite mild here in the UK, was fierce in Greece. I can only conclude that if LP is located in Cyprus, it is probably using directional antennae and the majority of the signal that we receive in the UK is "off the back of the beam".

The MOSSAD stations provided some useful baseline signals as they are assumed to be transmitted from Israel. Sure enough, all day 'round, no matter what the frequency, EZI, YHF, CIO and co. provided MASSIVE signals. As an illustration, the midday EZI transmission on 17410 and 19715 kHz are pretty poorly received in the UK. Over at the holiday QTH, these signals were very strong with just a foot of the set's internal whip antenna extended!. So strong in fact, that the mains hum on the transmitter could also be heard.

The Counting Stations, both English and German voices, were also received well in Greece. The German language Nui-Noichen transmissions were always weak as was Bulgarian Betty, perhaps suggesting that this station's name is a misnomer!. Other surprises included The Three Note Oddity (my favourite station!) which was a strong signal on Sunday evenings at 21.10 UTC on 5637 kHz. The English language station 274 which sent at 08.20 UTC each morning was also a consistently strong signal.

Our "Mystery Station" Nancy Adam Susan on 5531 kHz at 20.00 UTC was so strong that the mains hum could be heard on the transmission...perhaps this station hails from Israel, Greece or Turkey?.

The CW numbers stations also chipped in with a few useful additions to the log with the Rapid dashes outfit being heard daily at 15.30 UTC on 8190 kHz. The German Government station DEA47 also put in quite a respectable signal for the distance, with its daytime only messages on 12283 kHz.

What really puzzled me concerned the Single Letter HF Beacons (SLHFB's). I could hear only one, which sends the letter "R" on 7451 kHz. The renowned utility stations guide Klingenfuss lists these beacons with locations in the Russian and other former USSR states. The fact that they could not be heard in Greece seemed rather odd to say the least!.

MikeC...in LEROS..



The "Russian Man" and "English Man" Numbers Stations

Mike, Bath, UK

1. Introduction

Often heard, seldom mentioned is probably the maxim for this station. This may have something to do with the fact that the station seems to have no discernible schedule. If you want to hear it, you will need some patience (and a bit of the usual luck) but I can be pretty confident in saying that you'll find either (or both) on the air at any time and on any day.

Both stations are believed to be part of the same general operation from within the CIS, sending to agents of the KGB and GRU.

I should also add that there are a number of CW stations (see the ENIGMA Morse stations Supplement for further details) and the so-called German Lady that carry the same message formats and one can only assume that these are part of the same operation as none of the agent numbers appear to overlap. There is also a "German Man" but I have only heard this once — I would welcome any further reports of this variant in case my ears deceived me!

2. Characteristics

2.1. Message Formats

Both stations are unmistakable when you hear them. Broadcast quality AM transmitters appear to be used. In general, the signal strengths received are quite phenomenal at whatever frequency. Indeed, some of the signal strengths are so high that it has been possible on many occasions to unplug the antenna from the receiver and still hear the station with a massive signal! Transmitters are usually switched on five to ten minutes before a transmission. If you hear a strong carrier that you haven't noticed before, stay on the frequency. The station often "tunes up" 5 to 10 minutes before transmission with a steady 1kHz tone for about 30 seconds and you'll often hear some short snatches of the voice calling the agent once or twice.

The frequencies used are always exactly on a kilohertz point. In other words, if you hear a strong carrier on 13445.5kHz, it's almost certainly not a Russian or English Man — they would be on 13445 or 13446kHz exactly.

2.2. Voices

The stations use the same two types of synthesized voice for each language. I call them the "thin" and the "thick" voice. The thick voice is lower in pitch, slower in delivery and generally sounds very laboured. In contrast, the thin voice has a higher pitch, slightly faster delivery and sounds quite feble. Both voices speak the same digits but, as we shall see later, are always associated with particular formats of message.

2.3. Pronunciation

The numbers spoken by the English Man are unique and you'll know when you've found it — three is spoken as "thlee" and eight as "ate" (as in the past tense). It's quite unmistakable. Both English and Russian machines also have the same characteristic delay after any zero (or "noll") that is spoken. Here are the numbers as they are heard phonetically:

\* The German Man uses the same voice as the old Tyrolean Music station and messages end with "000000" — 6 zeroes without a break after the 3rd zero.

| No | Russian   | English |
|----|-----------|---------|
| 1  | Adim      | Wm      |
| 2  | Dva       | Two     |
| 3  | Tri       | Three   |
| 4  | Chedearin | Four    |
| 5  | Byad      | Five    |
| 6  | Shin      | Six     |
| 7  | Shesht    | Seven   |
| 8  | Vojim     | Ate     |
| 9  | Devierd   | Nine    |
| 0  | Noll      | Zero    |

3. Message Formats

There are a number of message formats that I have come across. Each is detailed below.

3.1. Format 1

This is always spoken by the thick voice whether in English or Russian.

123, 123, 123 — for 5 minutes  
 Pause  
 Key, Key  
 Group count, Group count  
 5F groups, each repeated  
 Key, Key  
 Group count, Group count  
 00000

Key is always 3F

Null Messages (No traffic) is given as:

123, 123, 123, 00000 — for 5 minutes

3.2. Format 2

This is always spoken by the thin voice whether in English or Russian.

123, 123, 123 (pause) 1 — for 5 minutes  
 Pause  
 Key and Group count  
 Key and Group count  
 5F groups, no repeat  
 000  
 000

Key is either 3F or 4F

Null Messages (No traffic) is given as:

123, 123, 123, 000 — for 5 minutes

3.3. Format 3

This message format is sent if there are two messages for the agent to be sent in the same transmission (rare). It is basically the same as format 2 and is again only spoken by the thin voice.

11111 72864  
 11111 73464  
 22222 74964  
 22222 72094  
 11111 72464  
 22222 72764  
 22222 72954  
 22222 71944  
 22222 72184  
 11111 72604  
 22222 72544  
 11111 00000

#### 4. Message Content

Messages appear to contain random 5 figure groups although there are frequent occurrences of messages which possess many double digit groups eg 10233, 43305, 44553 and even more strangely, never have certain digits at all! As an example, the Russian Man sent an 81 group message to agent 258 on the 25th of June 1994. Not one single 5 figure group contained either an 8 or a 9. This is very odd and certainly indicates some non-random behaviour (anyone with any clues please contact me via the ENIGMA address).

#### 5. Agents

The list of agents heard so far is extensive and indicates a wide-scale operation — (5 Zeros or 6 Zeros indicates whether the agent receives Format 1 or Format 2/3 messages):

| Russian Agent | Zeros   | English Agent | Zeros |
|---------------|---------|---------------|-------|
| 021           | ?       | 139           | 6     |
| 031           | ?       | 182-1         | ?     |
| 087-1         | 6       | 192           | ?     |
| 102           | ?       | 235           | 5     |
| 127           | 5       | 261           | 5     |
| 139           | 5       | 309           | ?     |
| 147           | 6       | 342-1         | 6     |
| 176           | 5       | 395           | 5     |
| 191-1         | 6       | 475           | ?     |
| 236           | 5       | 501           | 5     |
| 258           | 5 & 6   | 541           | ?     |
| 275           | 5 & 6   | 562           | 5     |
| 423           | 6       | 572           | 5     |
| 452           | 5       | 597           | 5     |
| 455           | ?       | 729           | 5 & 6 |
| 456           | 6       | 746           | 6     |
| 467           | 5 & 6   | 785-1         | ?     |
| 519           | 6       | 821           | 5     |
| 571           | 6       | 838           | 5     |
| 573           | 5       | 854           | ?     |
| 583           | 5       | 897           | ?     |
| 585-1         | 6       | 921           | 6     |
| 615           | Control | 934           | ?     |
| 684           | ?       | 947           | 5     |

#### Format 6

A new 4F format using the 'this' voiced Russian Man was heard on Wed. 24th August at 1310 on 13441.  
 Complete message:  
 "142 142 142 - 5 (for 3 minutes)  
 4823 1324 2574 3914 5234 (all repeated x5)  
 000 000"  
 The '5' position normally indicates number of messages. Does this mean that each 4F group was itself a message for ID 142?

697 5 982 5  
 724 5 & 6  
 738 5  
 748-1 6  
 758 5  
 798-1 ?  
 824-1 ?  
 828-1 6  
 841-1 6  
 846 5  
 891-1 ?  
 991-1 ?

#### 6. The Transmission Schedule

I have to admit that after over two years of intensive monitoring of the stations, I have yet to discern a schedule for either. Transmissions can begin at any five minute interval but most tend to start on the hour with a fair percentage of the rest starting at ten, twenty, forty, or fifty minutes past the hour.

There also seems no pattern to the frequencies used. I have found the station as low as 4400kHz and as high as 16300kHz. One particularly fruitful area however is the range 12100kHz to 12250kHz. About 10% of transmissions seem to occur in this portion of the spectrum but I don't know why! Perhaps it's just a place where propagation tends to be optimum for the distances required.

To find the Russian or English Man, I have a set of frequencies that I sweep through every hour, on the hour, when I'm listening. With practice, you will find that such a sweep can be done within the 5 minutes taken by the station to send its preamble. I also find it useful to search these frequencies at a more leisurely pace ten to fifteen minutes before the hour, listening for the tell tale strong, wide AM carrier signal.

During Winter evenings (1700-0000UTC) or early mornings, Summer or Winter (0000-0800UTC), I search:

4400-4750, 5000-5850; 6500-7000, 7500-8200, 9000-9350, 10100-11300kHz, 12100-12250kHz.

During Summer evenings (to 2200UTC) or daytime, Winter or Summer, I search:

7500-8200, 9000-9350, 10100-11300, 12100-12250kHz, 13300-13600, 14350-15000, 15800-16300kHz.

The station follows the usual practice of following the daily and annual variations in propagation. This means that frequencies in the daytime are higher than those in the evening and Summer frequencies are generally higher than those in the Winter.

#### 6.1. Repeat Transmissions

Repeats of messages (same time, same frequency) can often, but not always, be found at weekly or daily intervals. Hourly or twenty minute interval repeats are nearly always on a different frequency. A message is generally repeated on a lower frequency. I have heard messages repeated up to five times over a two day period.

#### 6.2. Concurrent Operation

The station has at least three transmitters. Also, at any one time one, two or three can be in operation in any combination of languages. For example, the English (4474kHz) and Russian (5105kHz) stations were active on the 23rd Dec at 2200hrs.

25



697 3 982 3  
 724 3 & 6  
 738 3  
 748 1 6  
 758 5  
 798-1 7  
 824-1 7  
 828-1 6  
 841-1 6  
 846 5  
 891-1 7  
 991-1 7

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5 78  
 6 748-1  
 5 78  
 5 & 6 724  
 5 697

22222 72764  
 11111 72464  
 22222 72964  
 74964  
 73464  
 11111 7264  
 7264

6.3. Regular Transmissions

Despite the lack of any general timetable, each station has at least one regular, weekly transmission. The messages (most often null) are always directed to the same agent. At the time of writing these are:

English Man

| Freq. (kHz) | Day       | Time (UTC) | Agent | Season        |
|-------------|-----------|------------|-------|---------------|
| 8074        | Monday    | 2010       | 947   | Summer/Winter |
| 10162       | Wednesday | 1910       | 947   | Summer/Winter |
| 8074        | Wednesday | 2010       | 947   | Summer/Winter |
| 6925        | Friday    | 2200       | 572   | Summer        |
| 5875        | Friday    | 2300       | 572   | Winter        |
| 14620       | Sunday    | 1900       | 729   | Summer        |
| 13572       | Sunday    | 1900       | 729   | Winter        |

Russian Man

|       |          |      |     |         |
|-------|----------|------|-----|---------|
| 10882 | Friday   | 2000 | 758 | Summer  |
| 14890 | Daily    | 0800 | 615 | Control |
| 13420 | Saturday | 1700 | 258 | Summer  |

The frequencies of these regular transmissions often vary by up to +/- 15kHz according to interference.

The stations appear to keep UTC time.

The first of the English Man's regular transmissions has been the source of some interesting monitoring. Agent 947 receives very little traffic - practically all messages are null (947, 947, 947, 00000). In the past year there have been just two messages for poor old 947. The first occurred on Monday the 21st March 1994 when the message sent on this day consisted of 401 (yes! 401) 5 figure groups. The transmission lasted for nearly two hours. The most recent message occurred on the 27th of June 1994 when 251 groups were sent - a transmission of nearly an hour's duration.

Hopefully this article has shed a little light on this interesting but seldom covered numbers station. It's certainly a large scale operation with many agents and many transmissions. I have a complete, typed log of all transmissions available for those that are interested. If any readers have any further information on the station, please don't hesitate to write to me c/o ENIGMA.

Note: Format 1 occasionally sends two group messages in which so far, the first group has always been 11111. (Russian only)  
 In mid 1991 Format 1 voice was heard daily on 14408/15702 with repeated '00000' or '55555' on the hour 0600-1600. (in Russian) - No messages were sent.

Format 5: Spoken by the 'nick' voice.  
 On 2 August the 'Control' transmission sent 615-07172/09248 where the last digits differed i.e. 2 and 8. This was followed by 615-22222 01268 615-00578 615-22222 08508.  
 Apart from the 22222; all these subsequent groups begin and end in the same digits, i.e. 0 and 8.

## ALPHA PHONETIC STATIONS - EZI

Brian, Crawley

During the week commencing 28 March 1994, I undertook an exercise to monitor the five known frequencies being currently used by the ALPHA PHONETIC station using the identifier EZI.

Why EZI? It just happened to conveniently fit the time I had available, due to holiday, during which I felt I could cover the most transmissions on a (fairly) regular basis. The period of monitoring covered 0830 to 1730 UTC daily from Monday 28 March to (Easter) Sunday 3 April 1994, a period of seven calendar days. Due to other commitments, there were gaps in the schedule, although four of the days were monitored continuously during this period.

From a total of 98 Freq/Time slots in use, 60 were used to send one or more messages, 16 sent no message (EZI 2), and the remaining 22 were not monitored. A total of 71 messages were sent of which 21 were original and 50 were repeats over the course of the week.

### Observations

At the end of the first day, these results had shown no pattern or repeated messages, and I was wondering whether the exercise was to be fruitless. However, as the week went on patterns began to establish themselves, along with several intriguing anomalies.

The pattern which established itself was that on any given day, the frequency or frequencies stayed the same for a given time. As an example, at 1430 utc 17410 & 19715 khz would both be in use, while at 1630 utc 9130 khz alone would be in use. This schedule was (and currently still is) being firmly adhered to. Where more than one frequency was in use, the message was transmitted on all those frequencies simultaneously.

With the exception of 9130 khz, all transmissions used two, or three frequencies simultaneously. However, since carrying out the exercise, the additional frequency of 6840 khz has been published by ENIGMA which would appear to pair with 9130 khz. This would seem to confirm that all transmissions are sent on at least two different frequencies simultaneously.

Each message broadcast was repeated immediately on completion of the first reading, the transmission was then ended with the customary "End of message - End of transmission". Carrier was then cut after varying times - usually only a couple of minutes. The exception to this was when two large groups were sent, when the signal was cut abruptly before the end of the repeated message, at exactly 5 minutes before the hour or half hour slot (ie Each transmission would last a maximum of 25 minutes). This would occur again during the next transmission of the same groups, with no attempt being made to rotate the messages or groups not being repeated.

Some messages were repeated in the same freq/time slot every day, some were transmitted for two or three days then replaced with a different message, some were replaced by a different message for a day or two only to reappear at the end of the week. Where two messages were sent one message might be dropped and replaced on the second day, while the other would be repeated. Although messages of the same length were sent on different freq/time slots, no messages were repeated outside of their own Freq/Time slots.

During quiescent periods in the transmissions, there could frequently be heard another of the ALPHA PHONETIC transmissions faintly on the carrier. It sounded as if the station was transmitting slightly off the current carrier frequency, since the pitch was high. It was quickly found, however that any attempt to resolve the station by tuning the receiver failed, and that the signal was audio re-transmitted on the carrier, probably due to RF interaction between two transmitted signals in close proximity. This effect was noticeable on several of the frequencies, especially where the carrier was received at good strength.

So as to the intriguing questions. Why were some messages repeated daily? Was it that the recipient had not acknowledge receipt of the message. Or was it that there were no other messages to send for that particular recipient. (It was noted that the Grp 71 message @ 1000 on 13533 KHz was STILL being sent on Sat 9 April, almost two weeks on, having been repeated daily for at least one week!)

The 1200 UTC transmission was unique in that it was read by another YL. The delivery was faster and the pronunciation differed markedly. All the other transmissions from EZI seemed to use the same (digitised?) voice. Why should 1200 UTC be different??

### Conclusions

EZI sends a large number of messages. These are sent on at least two different frequencies simultaneously, and are sent over a very large portion of the day, possible continuously over the 24 hour period. From this it would appear that EZI sends to a number of individuals as opposed to just one, since one person would be hard pressed to receive all the sent messages, let alone act on them!

Each individual would perhaps have one (or possible more) freq/time slots in which their messages would be sent. This would tie in with the observations of messages repeated daily, but only within the same freq/time slot. It may be that a freq/time slot serves more than one individual with the opening group identifying the individual the message is for, or organised through a rotor system. The use of multiple frequencies would ensure that at least one of the transmissions would be clearly heard by the recipient.

Since the number of groups in each message varies enormously, (from 9 to 79 during the period of monitoring), it would appear that the use of "fillers" to disguise the quantity of traffic is not used. Similarly, from this, combined with "EZI 2" being used to indicate no message, it would seem that the use of dummy messages is unlikely. However, this cannot be ruled out entirely since any of the transmitted messages could, in theory, be a dummy.

It would appear from the phenomena of re-transmission, that the same transmitting site is used for many (or all?) of the transmissions.

The abrupt cut of transmission during the repetitions, at exactly 5 minutes to the hour (or half hour) seems to indicate that the number of transmitters is limited, and that irrespective of the number of messages being sent the schedule must be adhered to at the cost of the repeats. The necessity for the repeats is also called into question by the lack of any rotation in the message into being transmitted during these incidents!

Since EZI appears to run to a definite Freq/Time schedule, it follows that all of the ALPHA PHONETIC stations should do the same. It should then be possible to work out schedule for the other stations, and from this gain further insights into the stations operations. Details such as the number of transmitters in use could be determined by combining these schedules.



During quietest periods in the transmissions, there could frequently be heard another of the ALPHA PHONETIC transmissions faintly on the carrier. It sounded as if the station was transmitting slightly off the current carrier frequency, since the pitch was high. It was quickly found, however that any attempt to resolve the station by tuning the receiver failed, and that the signal was audio.

Brian, Crawley

## ALPHA PHONETIC STATIONS - EZI

Mention Geoffrey Prime and you think of the GCHQ spy - situation has to those who are more aware and you think of that staple of the genre prime, son. Prime was heavily involved with both. Though it was not that through him down, Geoffrey Prime caused more than ripples to shimmer in intelligence circles because of his alter-ego. Prime, as we will see, was a recent example of the number enigma. A flash and blood example that we can use to show that those number transmissions are, definitely, sent out for use by agents working for 'the other side'.

Prime was involved - recruited would be a better work - in espionage on behalf of the KGB. He simply made contact by walking up to a Red Army Officer while he was in Berlin and offering his services. Working as he was for intelligence while on service with the RAF - he intercepted Eastern Bloc military communications - Prime was the sort of catch many a spy-master dreamed about!

Discharged from the RAF, Prime was encouraged to enter the London GCHQ office, where his ability as a Russian linguist would be used. It was, and Prime was soon hard at work translating communications intercepts. He was also passing on information to the KGB. In time, he was moved to Cheltenham GCHQ, where he was not only promoted but also made Head of Section! He had also been back to his pay-masters in East Berlin and was told to purchase a good short-wave receiver and reliable tap recorder. Over the years that the KGB used Prime, the wealth of information that he passed over was enough to earn him 38 years in jail - of which 3 years were for his paedophile activities, despite the much advertised security at GCHQ, it was one of Prime's other activities which caught him out. After an aborted attack on a young schoolgirl, who identified him enough for the Police to follow up on him - and, by doing so, pressure him into confessing to his wife about the attack, and later about his spy past - Geoffrey Prime found the strain too much. One more long term spy was brought to book.

Prime's equipment showed that he would receive his instructions on his short wave radio, in coded groups of figures. These are almost certainly broadcast, even now, to others agents in place everywhere and anywhere. Despite the advances made by the spy-catches of the counter-intelligence services, the medium of a short-wave broadcast - transmitted generally and covering a very wide area indeed - shows that it is more or less a secure system. After all, you can't DF a receiver, can you? Your antenna need not be a vertical, a yagi on anything so obvious. It can be the sets own telescopic whip, along piece of wire strung outside or around the room, or even a coat hanger! As for the set being a dedicated SW receiver I don't hold with that. The hardy Soviet-made Selena Vega can pick up the numbers stations just as easily as my state-of-the-art PRO 80 - and at one eighth of the cost! Using RCS - Reduced Carrier Sideband - you don't even need a BFO to translate the SSB! Just the AM system.

Meanwhile, if you are new to both short-wave and numbers then maybe this piece will show you that the use of the word 'spy' station isn't fantasy. We may be approaching this whole subject is our dedicated amateur way but, make no mistake, the people who receive and act on those transmissions are very serious, professional people indeed.

Doesn't that intrigue you? It does me!

John Griffiths is editor for the 'Scanning' section of Short-wave Magazine.

## SPYING BY NUMBERS

JOHN GRIFFITHS

One of the great misconceptions surrounding short-wave listening is that the short waves are boring, being filled with foreign voices, foreign music and more snap, crackle and pop than a bowl of breakfast cereal! Nothing, believe me, is further from the truth!

The revival in radio listening recently has been brought about by scanners - many with the facility to 'go low' to 500kHz and being capable of SSB resolution via a BFO which requires the finger expertise of a safe-cracker with a clear head! For many readers, it is this sort of set which will be in use when monitoring or trawling the bands for signals. Before I go any further let me just say that my own set-up is modest being a Sangean ATS 803A HF SSB RX'er, a SONY ICF PRO 80 HF SSB Scanner and a VT-225 for work above 108MHz. Yes, I have an obligatory ATU - Global 1000 - and four antennae to choose from; a Datong AD 370 Active Dipole looking E-W; a wire sloping at about 30 degrees, again E-W; a Scanmaster vertical and an ex-CB GRP 3 section whip that I modified by removing the loading coil for CB and rewinding with 60 turns of wire. It peaks brilliantly about mid HF with good coverage down around 1.8MHz and up to 30MHz. I also have an old and very much 'recovered' Selena Vega 215 without SSB - but that's for music!

You don't need a JRC NRD 535 or any other 'all singin', 'all dancin' radio. Nice if you've got one, but - in reality - you need the best you can buy yourself allied to the Earhole Mk1. A good ear, perhaps some filters in-between the radio and an extension speaker - I have one of those too! - And you are all set to monitor the short wave bands in reasonable rig. If you are serious about monitoring the bands, then you should be prepared to lash out some on the hobby. Oh, and what a hobby it can be...! We ENIGMA readers - new and old, seasoned and novice - are after numbers. Beacons, codes, phonetics - it's all the same to us. Being a self-help group we aim to throw some light on the mysterious numbers transmissions - and others - we can hear on the bands. Through already established folk like Simon Mason, we learn more about the transmissions than any number of hours sitting in a cold room - at least mine is! - With an angelpoise on, a tepid cup of coffee at our elbow and the dulcet tones of some very seductive female pouring out numbers from the crepitating ether of the air! However, while many of us accept facts and data about sites, about possible transmitter owners and the like, the fact I enjoy are about the people who receive these signals. About putting names and faces to the recipient on the other end who have a use for the streams of numerics we can all hear. This article is being written because I have found out one name, a recent name too, who - through dogged investigation within the confines of my library - is still fresh enough to bring a touch of the 'Oh yeah, I remember now....!' to those of us who are into serious logging of the stations.

For those who aren't, this may well be an insight and a spur!

## E.N.I.G.M.A. Bookshelf

FERRELL'S CONFIDENTIAL FREQUENCY LIST  
COMPILED BY GEOFF HALLIGEY  
ISBN 0-914542-25-7, 1994, 386 pp

The ninth edition of Ferrell's Confidential Frequency List is now available. This well known manual includes all identifiable ground station transmissions (except broadcast and amateur) reported during the past two years, covering the frequency range 1.605 kHz to 30 MHz.

Thus the list is directed mainly towards utility monitors, whether they pursue marine, aircraft, weather, military, press, embassy or other interests.

All modes are included - CW, USB and all the common (and many uncommon) types of RTTY. Monitors and RTTY analysts from the United Kingdom, North America, Australia and South Africa have all assisted in the compilation.

ENIGMA members will find a full list of frequencies of special interest to them (including many Spanish/American stations), although the detail is necessarily compressed as compared with ENIGMA'S publication.

Other separate lists cover international callsign allocations, the principal four-letter ICAO location indicators and breakdowns of the marine and aircraft channels, and of the whole frequency spectrum.

Diagrams are provided of the international time zones, marine NAVAREAS and of the world's aeronautical HF - R/T networks.

As an ENIGMA member you will already be interested in the more unusual transmissions, so do not miss this opportunity to seek out and identify still more of the many, sometimes elusive, radio transmissions that occupy the ether by day and night.

Geoff Halligey, Editor.

"SHORT WAVE MAGAZINE SAYS"..... The latest edition of this much loved volume is now available....covering in great depth all modes and utility services....spirally bound this easy to use reference book runs to 386 pages of information.....

The ninth edition of Ferrell's Confidential Frequency List is published by Listening In P.O. Box 123 Park Ridge NJ 07656 USA and is available from ;

PW Publishing Ltd., FREEPOST Arrowsmith Court Station  
Approach, Broadstone, Dorset BH18 BPW.  
Telephone 0202-659950 or Fax 0202-659950

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MORSE NUMBER STATIONS - AN ENIGMA  
SPECIAL FEATURE PART TWO

9) RAPID DASHES (M7) - This station, easily recognisable, and always a strong signal in England is unique in that it uses repeated 'tone sequences'.

Frequencies include 4036\*, 4580, 4882\*, 5155, 5425, 5475, 5860\*, 6801, 6835, 7380, 7404, 7605, 8175, 8190, 9165, 9386, 9971, 10582, 10922, 12250, 13405.

ID's repeat themselves and those logged so far are : -

035 078 109 234 351 446 529 555 619 772 791 833 863 902.844

Activity levels vary, but at present it is operating daily. Transmissions begin at any 10 minute interval within the hour, 20 & 40 minutes past the hour being favoured.

Format : (MCW) Constant carrier Rapid Dashes are sent for 10 minutes followed by a one minute pause. The first 'tone sequence' is then repeated for one minute, followed by the preamble.

e.g. '109 109 109 21 21 27 27  $\overline{\text{BT}}$   $\overline{\text{BT}}$  - 27 paired 5 figure groups follow in faster morse. Transmissions end with 'BT BT 21 21 27 27 000'

After a short pause the 2nd tone sequence repeats for on minute. The 'decode key' is always 2 Figures and is probably a group co-ordinate indicator. 'Tone Sequences' are made up of dots, dashes and long dashes in various combinations of 2 or 3 elements, and differ at each end of the message. They appear to serve the same purpose as Bulgarian Bette 'Circuit Numbers' indicating repeats. Group counts vary from 10 - 48. Uses a short zero.

10) " BULGARIAN BETTE " (M10) - The morse version of the now defunct voice transmission ( which still operates a daily voice control sequence) can be heard every day in CW. The station has similarities with 'Rapid Dashes', and the '3 short dashes' station and they may well be connected. Unlike 'rapid dashes' it uses an unmodulated carrier.

Frequencies include : 4030\*, 5030, 5301, 5521, 5737, 5860\*, 6944, 7475, 9165, 9386, 11415, 14562, 14650, (sometimes uses 2 parallel frequencies e.g. 5301//5860.

Format : Again, this station begins at any 10 minute interval in the hour with 10 minutes of rapid dashes. After one minute this is followed by the call e.g. '555 555 555 451 451 451 26' for 5-minutes. The 555 circuit number is then dropped, and a 2 figure group co-ordinate index added, e.g. '451 451 451 89 89 89 26 26  $\overline{\text{BT}}$   $\overline{\text{BT}}$ . Faster 5 figure pairs follow, in this case, 26.

At the end, keying slows down again with '  $\overline{\text{BT}}$   $\overline{\text{BT}}$  89 89 26 26 000. Uses a short zero.

M17 3410 Thu 2130 '66768'

10) " BULGARIAN BETTE " continued....

(N.B. this is identical to the ending sequence of '3 short dashes' station and if earlier part is missed it can be mistaken for it).

ID's repeat and include : - 049 179 253 287 325 351 451 487 565 571 684 708 771.

The circuit number is nearly always 555 which indicates same repeat time and frequency on the following day. Other triplets e.g. 333 indicate repeats on different frequency.

Unlike the old voice version agent numbers are not encoded into 5 figure groups. Multiple messages are quite common - upto 4 individuals identifications being addressed in the same transmission.

In these cases the call would be e.g. '333 333 333 571 571 571 19 287 287 287 32' etc. After the first message would be sent e.g. BT BT 51 51 19 19 287 287 287 74 74 32 32 BT BT and the second message would then begin.

Frequencies marked \* are shared with the old Bulgarian Bette - unlike this station, however, the morse version has abandoned 5F encrypted ID's in favour of 3F regular ID's (recurring).

11) THE ODD/EVEN STATION (M23)

First heard in December last year it has operated a more or less twice daily schedule ever since, appearing on the same frequencies at the same time for weeks on end.

On the 1st of December 1993 a test transmission was sent on 9285 kHz at 16.00 consisting of the ID '24' repeated for 12 minutes followed by 68 x 5 figure groups consisting of the figures 2,4,6, & 8 only. It ended '68-'. From then on at 10.00 daily it sent '197' in hand-keyed morse for 10-13 minutes. No messages followed. Occasionally the 197 would be another group of odd numbers e.g. 795. Rarely, even numbers are sent (usually 246), and in these cases messages always follow, repeating on the following day.

Format : - '197 197 197 BT 70 70 BT (70 x 5 figure groups follow) BT ?? BT 70 70 BT (repeat of message) BT AR.

Mistakes are frequent and are corrected by error signal. The operator used to get tired of sending 197's etc, they often flowed into each other eg. '971971971...' and pauses were common. An auto keyer now seems to be in use.

Frequencies used so far are 9285, 9235 (once) a mistake ?, 8307, 7520, 7850. Times logged 07.00, 08.00, 10.00, 15.00, 18.00, 21.00. At present the station operates at 21.00 on 7850, 07.00 on 7520. Uses long zeroes and unmodulated CW. Now daily at 17.00 and 21.00 on 7520//7850. (August)



12) TWO TONE STATION (M1)

This is another hand keyed operation and has a long and interesting history. It operated continuously from the early 1970's on two parallel frequencies of 4905//3957 at 20.00 every Tuesday and Thursday until August 6th 1993. It's identifications never varied, always being '025'. It uses a distinctive rough MCW (interrupted carrier) of which two separate audio tones are discernable. (Approx 250 Hz + 1 kHz) Uses short zeros.

It reappeared in January 1994 and became more adventurous operating a more random schedule using various frequencies of 4490, 4645, 5320, 5465, 6780, and ID's 150, 197, 913 at 07.00, 17.00, 18.00 and 20.00. In May of this year it reverted to its old ways and can now be heard every Tuesday and Thursday (025) at 18.00 on 5280//4514, and at 20.00 on 4905//3957. Recently, extra, unscheduled transmissions heard.

Format :- '025' for 5 minutes '381 381 42 42 42 BT (5 figure slow pairs) BT BT 381 381 42 42 000, group counts are usually 40. Occasionally 39, 41 & 42. Deviations from 40 may have some special significance.

It also rarely uses a different format which is worth listening out for. e.g. '025 025 12728 12728' for 2 minutes... long pause '333 11386 11386' repeated 4 times. '111 999 425 40 425 40' (40 x 5 figure groups) '425 40 111 000'. Triplets seem to be status indicators amongst number stations.

Two distinct keying patterns have been noted indicating 2 operators. Mistakes are frequent and sending is sometimes very poor, groups flowing into one another or mid - group pauses.

13) SLOW FIVE DASHES (M24)

Began in February 1994, a very active slow MCW version of the usual very fast 5 dash station. As both stations seem to use random frequencies and both use identical formats (yet don't share ID's) they are possibly the same operation.

ID's logged : 136 392 481 483 618 738 862 876 908 942.  
Null messages are common e.g. '483 483 483 00000'  
Less active recently. Group counts upto 70 with strong signal.

14) THE 'V' STATION (M20)

Sounds like strong single letter 'beacon' sending 'V's faster than usual and at regular intervals. Unmodulated CW. Another newcomer, first heard in April this year. It operated daily at 07.00 and 08.00 on 5550 kHz. Now it operates irregularly on 5550, 4460 & 7580 and may well be on other frequencies.

Format : - 'V's for 3 minutes. One minute of I's (with short pause at 30 seconds) 'BT BT 25 25 (25 x 5 figure groups at 9 groups per minute). BT BT ?? (one minute of I's again) BT BT 25 25 BT BT (repeat of message) BT BT AR AR. G/Co around 26.

Null message format : V's for 3 mins. 'BT BT 000' Uses short zero.

A possible 4th family, although by no means single letter, are the so-called 'pseudo - commercial' beacons and pseudo - time signals, these may well serve a similar purpose.

Despite the lack of material, much information has been gleaned concerning these mysterious transmissions, which future articles will cover.

In the meantime here's a list of family 2 & 3 beacons logged in the period May 1993 to July 1994.

#### CLUSTERS

##### BEACON S

5305.2 7038.8 8494.8 10871.9 13635.9 17015.9 20991.7

##### BEACON C

5305.4 7039.0 8495.0 10872.0 13636.0 17016.0 20992.0

##### BEACON D

Active in early 1994 in these clusters, but no longer operates.

All the above transmit simultaneously.

#### SOLITARIES (Regular)

BEACON R 3196//7452 24 hours per day

BEACON V 9162//5205 In Summer 24 hours possibly

5205//4570 In Winter 24 hours possibly

V Beacons are unique in that the spacing between 'V's varies irregularly and is quite noticeable over a short period. They also occasionally send VI instead of V.  
(Irregular)

BEACON F 4040 slow

BEACON L 3090-3096 region (variable) pronounced  
chirp to signal at times.

BEACON P 3182//3213 also 3167 3181 3416 4080 4605 3262  
5858 (drifts)

BEACON V 3181 10457 10284 16273

BEACON .-. 9160 is the Cyrillic Я (pronounced 'yah')

BEACON C 6968 10612

Many more certainly exist but, appear only for short periods, they can easily be missed. We have received a good selection of information from readers about SLB's for future publication.